

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION**

MONITORING AND REPORTING PROGRAM NO. 01-103
FOR
ISG ENERGY, LLC, OWNER/OPERATOR
MESQUITE LAKE RESOURCE RECOVERY
DISCHARGE OF INDUSTRIAL WASTEWATER FROM A
15-45 MEGAWATT (NET) ALTERNATIVE FUEL POWER PLANT
South of Brawley – Imperial County

Location of Discharge: Rose Drain in the SW ¼ of Section 27, T14S, R14E, SBB&M

MONITORING

1. The collection, preservation and holding times of all samples shall be in accordance with U.S. Environmental Protection Agency approved procedures. Unless otherwise approved by the Executive Officer, all analyses shall be conducted by a laboratory certified by the State Department of Health Services. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants" (40CFR 136), promulgated by the United States Environmental Protection Agency.
2. Compliance with the discharge limitations shall be determined at the end of the discharge pipe.
3. If the facility is not in operation, or there is no discharge during a required reporting period, the discharger shall forward a letter to the Regional Board indicating that there has been no activity during the required reporting period.
4. A sampling station shall be established where representative samples of the effluent can be obtained. All samples shall be taken at the end of the outfall. Effluent monitoring is required when any day operation occurs, including short cycle operations and regular maintenance where discharge occurs. The discharger shall provide the location of the sampling station in all monitoring reports.

EFFLUENT MONITORING

1. Wastewater discharged into the Rose Drain shall be monitored for the following constituents:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Chlorine	mg/L	Grab	Daily ¹
Hydrogen Ion (pH)	pH Units	Grab	Daily
Temperature	°C	Grab	Daily
Flow	MGD ²	Measurement	Daily

¹ Daily = Reported monthly with arithmetic mean of daily flow calculated for the whole month.

² MGD = Million Gallons-per-Day

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Total Suspended Solids (TSS)	mg/L	Grab	Weekly
Total Dissolved Solids (TDS)	mg/L	Grab	Weekly
Zinc	$\mu\text{g/L}^3$	Grab	Weekly
Ammonia	mg/L	Grab	Weekly
Copper (Total)	mg/L	Grab	Weekly
Chromium (Total)	mg/L	Grab	Weekly
Iron (Total)	mg/L	Grab	Weekly
Total Phosphorus	mg/L	Grab	Weekly
VOCs ⁴	$\mu\text{g/L}$	Grab	Annually

RECEIVING WATER MONITORING

1. Water in the Rose Drain shall be monitored for the following constituents. All samples shall be taken between between 6 a.m. and 6 p.m. The sampling station shall be maintained where representative samples of mixed water can be obtained. Said sampling station shall be located midstream in Rose Drain at a point where the discharge and receiving waters have thoroughly mixed, but not exceed 50 feet downstream from the point of discharge.

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Hardness	mg/L	Grab	Weekly
Hydrogen Ion	---	Grab	Weekly
Dissolved Oxygen	mg/L	Grab	Weekly
Temperature	$^{\circ}\text{C}$	Grab	Weekly
Suspended Solids	mg/L	Grab	Weekly

2. Water in the Rose Drain shall be monitored for temperature at approved sampling stations. Sampling shall be conducted weekly at stations above and below the Rose Drain discharge point.

³ $\mu\text{g/L}$ = Micrograms per Liter

⁴ VOCs = Volatile Organic Compounds

3. In conducting the receiving water sampling, attention shall be given to the presence or absence of:
 - a. Floating or suspended matter
 - b. Discoloration
 - c. Aquatic Life
 - d. Visible film, sheen or coating
 - e. Fungi, slime or objectionable growths
 - f. Potential nuisance conditions

EFFLUENT TOXICITY TESTING

The discharger shall conduct toxicity testing on the effluent as follow:

<u>Constituent</u>	<u>Unit</u>	<u>Type Sample</u>	<u>Minimum Frequency of Test</u>
Chronic Toxicity	tu _c	Composite	Quarterly
Acute Toxicity	% Survival	Composite	Quarterly

Both test species given below shall be used to measure chronic toxicity:

<u>Species</u>	<u>Test Duration Effect</u>	<u>(Days)</u>	<u>Reference</u>
Fathead Minnow (Pimephales Promelas)	Larval Survival	7	EPA/600/4-91/002 (Chronic) EPA/600/4-90/027F (Acute)
Water Flea (Ceriodaphnia dubia)	Survival; Number of Young	7	EPA/600/4-91/002 (Chronic) EPA/600/4-90/027F (Acute)

Toxicity Test Reference: Methods for measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fourth Edition, EPA/600/4-90/027F, August, 1993. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water for Freshwater Organisms, EPA/600/4-91/002, July, 1994.

Dilution and control waters may be obtained from an unaffected area of receiving waters. Standard dilution is an option and may be used if the above source is suspected to have toxicity greater than 1.0 tu_c. The sensitivity of the test organism to a reference toxicant shall be determined concurrently with each bioassay and reported with the test results.

Chronic toxicity may be expressed and reported as toxic units (tu_c) where:

$$tu_c = 100/NOEC$$

and the No Observed Effect Concentration (NOEC) is expressed as the maximum percent effluent of test water that causes no observed effect on a test organism, as determined in a critical life stage toxicity test indicated above.

Acute toxicity may be calculated from the results of the chronic toxicity test described above and shall be reported along with the results of each chronic test. Acute toxicity shall be expressed as percent survival of test organism over a ninety-six hour period in 100% effluent.

REPORTING

1. The discharger shall arrange the data in tabular form so that the specified information is readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with waste discharge requirements.
2. The discharger shall report with each sample result the applicable Minimum Level (as described in the California Toxics Policy) and the laboratory current Method Detection Limit, as determined by the procedure in 40 CFR 136 (revised as of May 14, 1999).
3. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) analyses were performed;
 - d. The individuals(s) who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
4. Monitoring reports shall be certified under penalty of perjury to be true and correct, and shall contain the required information at the frequency designated in this monitoring report. The results of any analysis taken more frequently than required at the locations specified in the Monitoring and Reporting Program, shall be reported to the Regional Board.
5. Each report shall contain the following statement:

"I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations."
6. A duly authorized representative of the discharger may sign the documents if:
 - a. The authorization is made in writing by the person described above;
 - b. The authorization specified an individual or person having responsibility for the overall operation of the regulated disposal system; and
 - c. The written authorization is submitted to the Regional Board's Executive Officer.
7. The discharger shall report any instances of noncompliance with the requirements of this Board Order in the monthly monitoring report. Reporting of any failure in the facility shall be as described in Provision No. 18.
8. Daily, weekly, semi-weekly, and monthly monitoring reports shall be submitted by the 15th day of the following month. Quarterly monitoring reports shall be submitted to the Regional Board by

January 15, April 15, July 15, and October 15 of each year. Annual reports shall be submitted by January 15 of each year.

9. Reports shall be submitted to:

California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive, Suite 100
Palm Desert, CA 92260

Executive Officer

September 5, 2001

Date